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Application No. 09/982,617

Docket No.: 65783-0007

**REMARKS**

This response is intended to be fully responsive to the Final Office Action ("Office Action") having a mailing date of July 3, 2006, wherein claims 1-41 were rejected. Applicants have carefully reviewed the Office Action and thank the Examiner for the response; in particular, the Examiner's detailed response to the arguments. Applicants respectfully request reconsideration of the present application in view of the following remarks.

**Claim Rejections – 35 U.S.C. § 102**

Claims 1, 4, 7, 9, 11, 14, 17, 19, 22, 24-30, 32, 33, 36, 38 and 40 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent 6,678,892 to Lavelle et al. ("Lavelle").

**A. Independent Claim 1**

Claim 1 recites, in part:

an interface stage for interfacing with a digital data network;  
a multi-format decoder for decoding at least two different encoding formats for an  
audiovisual data stream;  
a microcontroller for controlling said interface stage and said decoder; and  
connections for connecting said decoder to one or more audiovisual output  
devices.

(Emphasis added). Lavelle teaches an entertainment unit for a vehicle. (See Abstract). However, Lavelle does not teach "a digital data network." (Emphasis added). Further, Lavelle does not disclose "a multi-format decoder for decoding at least two different encoding formats for an audiovisual data stream." Moreover, Lavelle does not disclose "a microcontroller for controlling said interface stage and said decoder." As explained below in detail and responding to the Examiner's detailed comments, Lavelle does not disclose each and every element of claim 1. Therefore, claim 1 is allowable over the cited prior art.

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a. “an interface stage for interfacing with a digital data network”

The Examiner stated that a “Lavelle specifically discloses a digital bus, which can comprise a single wire, which will interconnect a plurality of different devices.” (See the Office Action, Page 14, First Paragraph) (See Lavelle; Elements 170, 172; FIGS. 1A and 1B; Col. 4, Line 66 – Col. 5, Line 7; Col. 9, Line 60 – Col. 10, Line 2). Additionally, the Examiner stated that “Lavelle clearly discloses wherein the system comprises ‘input/output interfaces’” and “this clearly meets the claim limitation of an interface stage for interfacing with a digital data network.” (See the Office Action, Page 4; Lavelle, Col. 3, Lines 25-43).

Applicants continue to argue that Lavelle does not disclose “a digital data network” and “an interface stage for interfacing with a digital data network,” as recited in claim 1. Indeed, Lavelle teaches that “the buses (170, 172) shown in FIG. 3 are simply aggregations of wires carrying similar types of signals, other types of buses may be employed. For example, one or more wires or other signal transmission means may be used for each of the audio and the video signals, with the signals being multiplexed with respect to, for example, time, frequency, or codes.” (See Col. 9, Lines 60-66). Thus, the buses (170, 172) are merely an aggregation of wires which does not anticipate a digital data network. (See FIG. 3).

Lavelle discloses a system that includes multiple wires bundled to include similar signals (e.g., a bundle of a plurality of wires, each wire carrying for example a discrete analog signal). (See Col. 9, Lines 60-62). Lavelle further discloses that the signals may be multiplexed (e.g., by time, frequency, and codes). (See Col. 9, Line 62 – Col. 10, Line 2). However, Lavelle does not disclose a digital data network, as recited in claim 1. Moreover, the Examiner’s argument appears to claim that an interface stage is inherent based on the configuration of Lavelle. (See FIG. 3). However, Applicants note that Lavelle does not disclose a “digital data network” nor “an interface stage for interfacing with a digital data network,” as claim 1 recites.

Applicants note that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). “The

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identical invention must be shown in as complete detail as is contained in the ... claim.”  
*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). See MPEP § 2131.

Here, Lavelle does not disclose every detail, i.e., a digital data network, as is required by 35 U.S.C. 102(e) and MPEP § 2131. In particular, the types of wired communication cited in Lavelle discloses wire bundles, discrete audio and video signals, and even multiplexed signals, but not a digital data network. Moreover, Applicants submit that a digital data network is not inherent because Lavelle does not contemplate such a configuration. Indeed, Lavelle teaches that different types of buses are possible, but does not mention a digital data network in an otherwise complete list of bus types. Therefore, Lavelle does not show “a digital data network” and “an interface stage for interfacing with a digital data network,” as claim 1 recites. For at least this reason, claim 1 is allowable over the cited prior art.

**b. “a multi-format decoder for decoding at least two different encoding formats for an audiovisual data stream”**

The Examiner stated that “Lavelle discloses wherein the signal processing/conversion facilities, 127, can perform decoding for the inputs of any of the input devices (wherein each device is capable of it’s own encoding and the facilities, 127, performs all of the decoding ... [a]s the inputs include a large plurality of different devices with different formats ... the signal processing/conversion facilities clearly qualifies as a ‘multi-format decoder for decoding at least two different encoding formats for an audio-visual stream.’” (See the Office Action, Page 15).

Applicants note that the signal processing/conversion facilities 127 only possibly show the use of a Digital Signal Processor (DSP) and facilities for performing encoding/decoding etc. (See Col. 6, Lines 27-30). However, use of a DSP and or performing encoding and decoding does not describe “a multi-format decoder,” as claim 1 recites. The Examiner’s argument requires an inference that, simply because a DSP is used, that there must be more than one encoding format. Although it is possible to program a DSP for more than one format, it is clear from Lavelle that signal processing/conversion facilities 127 uses a single format.

Moreover, Lavelle does **not** disclose that the plurality of devices, e.g., TV tuner 114 and DVD player 118, have different encoding formats. Indeed, FIG. 1A shows that each of the

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plurality of devices, e.g., 114, 118, are connected to common busses for video 170 and audio 172. Such a connection implies that the devices, e.g. 114, 118, which are connected to the same bus, are encoding the signals in the same manner. Thus, Lavelle teaches a single encoding format because all of the devices are connected to the same bus.

In sum, there is no teaching or suggestion that more than one encoding scheme is used in Lavelle. Thus, Lavelle does not disclose "a multi-format decoder," as claim 1 recites. Moreover, claim 1 recites "for decoding at least two different encoding formats for an audiovisual data stream," that Lavelle does not disclose. Signal processing/conversion facilities 127 does not indicate "a multi-format decoder" or "at least two different encoding formats," as claim 1 recites. At least because Lavelle does not disclose "a multi-format decoder" and "at least two different encoding formats," claim 1 is allowable over the cited prior art.

c. "a microcontroller for controlling said interface stage and said decoder"

Lavelle does not disclose "a microcontroller for controlling said interface stage and said decoder," as claim 1 recites. The Examiner stated that "Lavelle specifically discloses wherein the entire system is implemented and controlled by a computer platform consisting of a CPU, RAM and I/O. This clearly reads upon the claimed 'microcontroller for controlling said interface stage and said decoder.'" (See the Office Action, Page 16).

Lavelle discloses that "the present invention may be implemented in various forms of hardware, software, firmware, special purpose processors, or a combination thereof." (See Col. 3, Lines 24-27). However, Lavelle does not disclose the recited "microcontroller for controlling said interface stage and said decoder." Indeed, Lavelle makes broad statements regarding implementation and does not describe a specific embodiment, including the claimed "microcontroller" and the structure recited related to the microcontroller "for controlling said interface stage and said decoder."

In sum, the Examiner has pointed to an element including a "microcontroller," but has not shown where Lavelle recites a "microcontroller for controlling said interface stage and said decoder." Indeed, the implementation of Lavelle may have an automatic interface stage and a

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mechanically switched input to a decoder. However, none of these details are shown in Lavelle (Applicants further remind the Examiner that Lavelle does not disclose the interface stage and decoder as claimed).

Therefore, because Lavelle does not disclose each and every element of the claim, claim 1 is allowable over the cited prior art.

#### **B. Claim 7**

Claim 7 depends from claim 1. Thus, for at least the same reasons as claim 1, claim 7 is in condition for allowance. Moreover, in addition to the reasons for the independent claim, claim 7 includes additional reasons for allowability.

Claim 7 recites, in part:

wherein said decoder outputs a decoded audio signal to said interface stage for transmission over said digital network.

(Emphasis added). However, Lavelle does not disclose at least “for transmission over said digital network,” as claim 7 recites. The Examiner stated that “conversion facilities, 127, will process audio signals ... and then provide those signals for transmission over the bus (which consists of a digital data network, as indicated above).” (See the Office Action, Page 16). However, as argued above with respect to claim 1, the bus in Lavelle does not disclose a digital data network. Thus, Lavelle does not disclose “for transmission over said digital network.” Therefore, because Lavelle does not disclose each and every limitation of claim 7, claim 7 is allowable over the cited prior art.

#### **C. Independent Claim 11**

Claim 11 recites, in part:

a digital data network installed in a vehicle;  
at least one storage, playback or receiver device on-board said vehicle for  
providing an encoded audiovisual data stream to said digital data network;  
at least one audiovisual output device connected to said digital data network; and

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a multi-format decoder board for decoding audiovisual data streams in a plurality of encoding formats, said decoder board decoding said audiovisual data stream for use by said at least one audiovisual output device;  
wherein said decoder board comprises:  
an interface stage for interfacing with a digital data network;  
a multi-format decoder for decoding at least two different encoding formats for an audiovisual data stream;  
a microcontroller for controlling said interface stage and said decoder; and  
connections for connecting said decoder board to one or more audiovisual output devices.

(Emphasis added). Lavelle does not disclose at least the claim elements argued in detail below. Because Lavelle does not disclose each and every element, claim 11 is in condition for allowance. Moreover, Applicants reserve the right to argue other patentable aspects of the claims in future communications.

a. "a digital data network installed in a vehicle"

Lavelle does not disclose "a digital data network installed in a vehicle." Lavelle discloses "a video bus 170" and an "audio bus 172." (See Col. 5, Lines 3-7). As explained in detail above with respect to claim 1, Lavelle does not show "a digital data network."

b. "at least one audiovisual output device connected to said digital data network"

Lavelle does not disclose "at least one audiovisual output device connected to said digital data network." (Emphasis added). As discussed above in detail with respect to claim 1, Lavelle does not disclose "a digital data network." Thus, because Lavelle does not disclose a digital data network, Lavelle cannot disclose "at least one audiovisual output device" connected to "said digital data network," as claim 11 recites.

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c. "a multi-format decoder board"

Lavelle does not disclose "a multi-format decoder board" and "a plurality of encoding formats," as claim 11 recites and as explained in detail above with respect to claim 1. In short, the Examiner has not shown where in Lavelle these claim elements are particularly shown and these elements are not inherent to Lavelle.

d. "an interface stage for interfacing with a digital data network"

Lavelle does not disclose "an interface stage for interfacing with a digital data network." As discussed above, Lavelle does not disclose "a digital data network." Thus, Lavelle cannot disclose "an interface stage for interfacing with a digital data network," as claim 11 recites. (Emphasis added).

e. "at least two different encoding formats for an audiovisual data stream"

Lavelle does not disclose "a multi-format decoder for decoding at least two different encoding formats for an audiovisual data stream." As discussed above in detail with respect to claim 1, Lavelle does not disclose these claim elements.

f. "a microcontroller for controlling said interface stage and said decoder"

Lavelle does not disclose "a microcontroller for controlling said interface stage and said decoder." As discussed above in detail with respect to claim 1, Lavelle does not disclose these claim elements.

In sum, as explained above in detail, because Lavelle does not disclose each and every element of the claim, claim 11 is allowable over the cited prior art.

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**D. Claim 17**

Claim 17 depends from claim 11. Thus, for at least the same reasons as claim 11, claim 17 is in condition for allowance. Moreover, in addition to the reasons for the independent claim, claim 17 includes additional reasons for allowability.

Claim 17 recites, in part:

said decoder outputs a decoded audio signal to said interface stage for transmission over said digital network.

(Emphasis added). However, as explained above in detail with respect to claim 1, Lavelle does not disclose at least “said digital network.” Thus, Lavelle cannot disclose “a decoded audio signal to said interface stage for transmission over said digital network.” Therefore, claim 17 is allowable over the cited prior art.

**E. Claims 22 and 24-28**

Claims 22 and 24-28 depend from claim 11. Thus, for at least the same reasons as claim 11, claims 22 and 24-28 are in condition for allowance. Moreover, in addition to the reasons for the independent claim, claims 22 and 24-28 include additional reasons for allowability.

Claims 22 and 24-28 include claim elements connecting to a digital data network. As discussed above in detail with respect to claim 1, Lavelle does not disclose a digital data network. Thus, because a digital data network is not disclosed, the claim elements of claims 22 and 24-28 cannot be “connecting to a digital data network.” For at least this reason, claims 22 and 24-28 are allowable over the cited prior art.



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**F. Independent Claim 29**

Claim 29 recites:

A method of handling a digital data stream carrying data encoded in a plurality of different encoding formats, said method comprising processing said digital data stream through a decoder board that comprises a multi-format decoder for decoding at least two different encoding formats for audiovisual data and output a resulting decoded audiovisual signal to one or more audiovisual output devices.

(Emphasis added). However, as explained in detail above with respect to claim 1, Lavelle does not disclose each and every limitation of claim 29. Lavelle at least does not disclose a “digital data stream,” “data encoded in a plurality of different encoding formats,” “processing said digital data stream through a decoder board,” “a multi-format decoder,” “decoding at least two different encoding formats,” and an “output a resulting decoded audiovisual signal.” At least because Lavelle does not disclose every element of the claim, claim 29 is allowable over the cited prior art.

**G. Claim 30**

Claim 30 depends from claim 29. Thus, for at least the same reasons as claim 29, claim 30 is in condition for allowance. Moreover, in addition to the reasons for the independent claim, claim 30 includes additional reasons for allowability.

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Claim 30 recites, in part:

interfacing said decoder board to a digital data network with an interface stage,  
said digital data stream coming to said decoder board via said digital data  
network.

(Emphasis added). However, as explained in detail with respect to claim 1, Lavelle does not disclose a “digital data network,” an “interface stage,” and a “digital data stream,” as claim 30 recites. Thus, claim 30 is in condition for allowance.

#### **H. Independent Claim 36**

Claim 36 recites, in part:

interface means for interfacing with a digital data network;  
multi-format decoder means for decoding at least two different encoding formats  
for an audiovisual data stream;  
controller means for controlling said interface and said decoder; and  
output means for connecting said decoder board to one or more audiovisual  
output devices.

(Emphasis added). Lavelle does not disclose each and every limitation of claim 36, as emphasized above and discussed in detail with respect to claim 1. For example, Lavelle does not disclose an “interface means for interfacing with a digital data network,” a “multi-format decoder means,” and a “controller means for controlling said interface stage and said decoder.” At least because Lavelle does not disclose these claim elements, claim 36 is allowable over the cited prior art.

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**Claim Rejections – 35 U.S.C. § 103**

Claims 2, 3, 5, 6, 8, 10, 12, 13, 15, 16, 18, 20, 21, 23, 31, 34, 35, 37, 39 and 41 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lavelle. Applicants note that these dependent claims depend from claims patentably distinguished from the prior art above. Thus, at least based on their dependency, the claims are allowable over the cited prior art.

**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 65783-0007 from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to such deposit account number.

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Respectfully submitted,

  
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